REMARKS

Claims 1-34 were pending in the application. In the Office action claims 1, 2, 6, 8, 9, 12, 13, 16, 17, 19, and 20 were rejected under 35 U.S.C. § 102(b) as being anticipated by Kotzin, et al., U.S. Patent No. 6,038,263 (Kotzin). Claims 23-34 were rejected under 35 U.S.C. § 103(a) over Kotzin in view of Langberg, et al., U.S. Patent No. 5,852,630 (Langberg). By way of this amendment, new claims 35-41 have been added, therefore claims 1-41 are pending in the application.

New claims 35-40 are added to recite sum and difference outputs based on the first and second signals. This is supported at least at page 10 lines 10-13.

New claim 41 depends from claim 1 and is added to recite that the first signal is based, at least in a part, on an inverted version of the second signal as shown in Figs. 3-4.

DRAWING CHANGES

The drawings have been changed to show the correct relationship between the generated signals by adding a minus sign (-) to one input of component 330 on Fig. 3 and 430 on Fig. 4. This correction is supported in the specification at least on page 9, lines 13-16 and page 10, lines 11-13. Formal drawings will be submitted upon allowance.

SECTION 102(b) REJECTIONS

Independent claims 1, 12 and 23 have been amended to recite, in part, "generating a first signal based on a first data stream having a first pilot and a second data stream ... the first signal including the first pilot and an inverted version of the second pilot." The amendment highlights a limitation present in the original presentation of the claims ("the second signal is diverse relative to the first signal") to better distinguish from the prior art. To further illustrate, amended Figures 3 and 4 show the correct relationship between the first and second signals. No new matter has been added.

Kotzin does not teach or suggest this claim element of the current application. Kotzin is applicable to single protocol systems. Kotzin does not teach or suggest using a first pilot and an inverted version of the second pilot to generate a second signal diverse relative to the first signal. Further, Kotzin does not teach or suggest suitability of use with a plurality of transmit diversity protocols, as claimed in the current application. For at least these reasons, Kotzin is easily distinguished from a device in accordance with the current disclosure, especially in view of the current amendments. Claims 1, 12, and 23 are therefore allowable as are there respective dependent claims 2-11, 41; 13-22; and 24-34. In view of the amendments and above remarks, the applicants request the rejection under Section 102(b) be withdrawn.

SECTION 103(A) REJECTIONS

Claims 23-34 were rejected under section 103(a) over Kotzin in view of Langberg. The Office action relies on Langberg only to supply the teaching of using a computer readable media. Langberg does not teach or suggest using a pilot signal of any kind and therefore cannot teach or suggest generating a first pilot signal as claimed. Since Langberg does not teach or suggest the limitation missing from Kotzin, as discussed above, the combination does not teach or suggest all the limitations of the independent claim 23. Further, there is no suggestion in Kotzin or Langberg to combine teachings from such disparate arts as the CDMA cellular communication system of Kotzin and the DSL channel equalization process of Langberg. For at least these reasons, the rejection under 35 U.S.C. § 103(a) should be withdrawn with respect to claims 23-34.

New independent claim 35 recites at least the limitations discussed above with respect to the Section 102(b) rejections and is therefore believed allowable, as are its new dependent claims 36-40.

In view of the above, each of the presently pending claims in this application is believed to be in immediate condition for allowance. Accordingly, the Examiner is respectfully requested to pass this application to issue.

Appropriate fees for one new independent and five new dependent claims are attached. However, if an additional fee or refund is due, the Commissioner is directed to credit or debit our Deposit Account No. 13-2855.

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Respectfully submitted,

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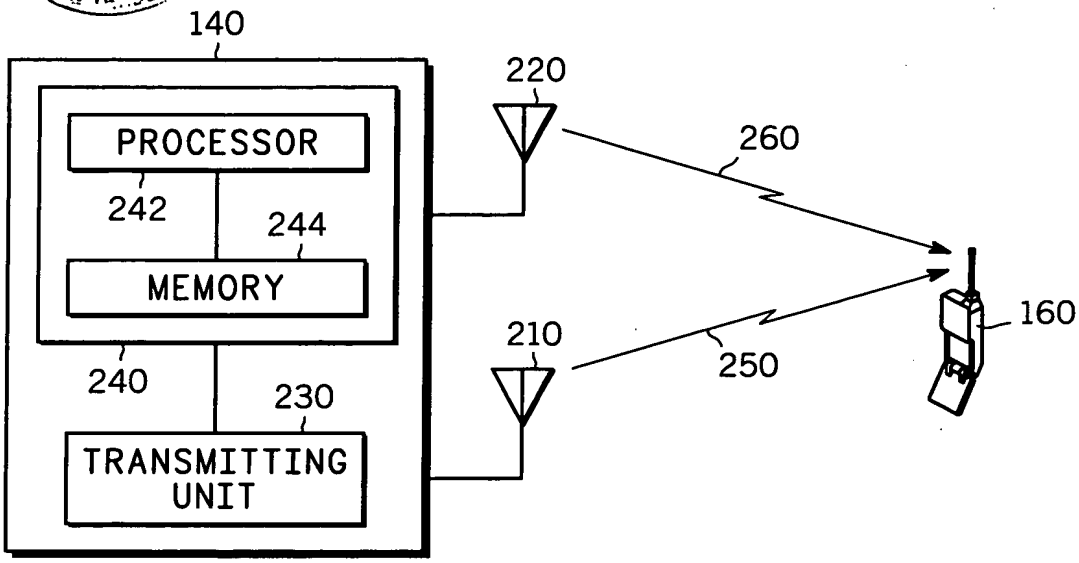

FIG. 2

FIG. 3

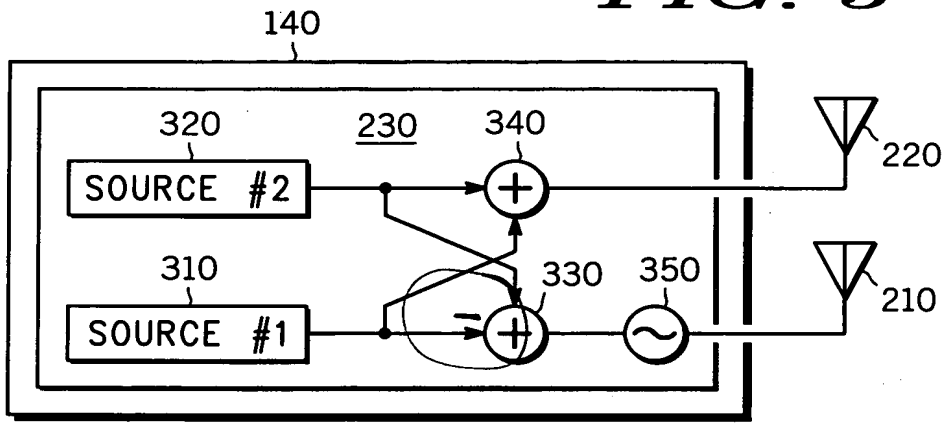

FIG. 4